Prince E. I.
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ECONOMIC OVERVIEW

Review of Selected Trends in the PRINCE EDWARD ISLAND Economy 1971 - 1977

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INTRODUCTION:

This Economic Overview examines selected economic trends for the 1971 - 1977 period.

The purposes of this paper are:

I. to provide an information base with respect to trends in terms of level of income, income distribution, population, labour force and employment and the structure of economic activity to be used as a resource document in strategic and sector planning efforts for Phase III.

II. to raise issues relevant to development planning and identify important areas for in-depth analysis as part of the Phase III planning process.

III. to provide a general framework or picture of the Province's economy which may be useful for policy-makers and other departments of government.

However, this analysis provides only a selective view of certain aspects of the economy.

There are a number of other areas of macro-analysis which should be included to provide a more complete picture. These are presently being initiated and include:

I. analysis of the level and pattern of investment activity which has occurred, both private and public and the potential overall economic impact of investing in certain sectors. This involves an examination of the extent of inter-dependency between sectors.

II. import and export activity and its implications in terms of potential effectiveness of plan spending.

III. the role of government in the provincial economy.

IV. the pattern of trade-offs between major developmental concerns and their implications in terms of setting goals for the development plan.

In addition, it is intended that macro-analysis should be carried out on a sectoral basis for the major economic sectors.

This paper examines past trends during the 1971 - 1977 period. It is planned that a summary and issues paper will be prepared, based on this paper, which can be used to discuss the implications of these trends for the future and to contribute to efforts which are presently underway to identify and examine a number of broad issues important to development policy planning.*

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* It must be emphasized that this is by no means a "final picture" but rather a paper for discussion, criticism and modification.

I. THE LEVEL AND DISTRIBUTION OF P.E.I. INCOME

i) Introduction:

There are a complex set of economic and social factors determining the degree of 'well-being' and the state of development in the Province. The related set of economic and social indicators are equally complex.* This analysis will only include certain of the measures of economic development and their implications.

Improvements in the level of per capita incomes and in the pattern of distribution of the Province's income, have an important influence upon the welfare of Prince Edward Islanders.

1. THE LEVEL OF PERSONAL INCOME

One traditional indicator of economic development is the level of, and extent of increase in per capita incomes. The use of this measure, should, however, at the outset, be subject to the following qualifications:

1. inter-regional differences in per capita incomes do not necessarily adequately reflect inter-regional disparities in the level of 'well-being' or standard of living since there are a number of determinants of well-being.

2. growth in per capita income, by itself, is perhaps more useful as an indicator of economic growth rather than

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* For example - to adequately assess and compare levels of well-being it is necessary to examine a set of indicators such as: level of income, income distribution, education levels, labour force participation, employment, unemployment, productivity levels, real purchasing power of incomes as measured by prices of major consumer expenditures for housing, food, clothing, transportation, household amenities, recreation, health services etc. Certain of these indicators are examined in this report. In addition, of course, there are a number of un-measurable factors characterizing lifestyle and quality of life in the Province.

economic development.

3. the relationship between the objectives of increased per capita incomes and improvement in other development indicators such as income distribution and employment levels, is unclear.

While recognizing these limitations, it is important to analyze personal income since the development plan has attempted to improve the overall level of personal income and per capita incomes. In addition, analysis of the components of personal income and growth in these components provides a useful insight into the structure of the Province's economy.

i. Total P.E.I. Personal Income

Personal income includes the following components:

1. Wages, salaries, supplementary labour income and military pay
2. Net income received by farm operators from farm production
3. Net income of non-farm unincorporated business
4. Interest, dividend and miscellaneous investment income
5. Government transfer payments
6. Other income

In 1976 total Prince Edward Island Personal Income in actual dollar terms, was 2.3 times greater than in 1971, increasing from a level of $243 million in 1971 to $558 million in 1976.

The rate of growth (compound annual) of personal income during this period was 18.2%, which was higher than the rate of growth of personal income for Canada as a whole, and the other two Maritime Provinces and very slightly below that of Newfoundland.

The level of income earned in the Province (total income less transfer payments) increased from $194 million in 1971 to $438 million in 1976, while the level of transfer pay-

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ments increased from $49 million to $120 million. The proportion of total income which was earned, however, declined from an average of 81% during the 1966-1971 period to 79% during the 1971-1976 period, suggesting a slightly increased dependency of the Province's residents upon transfer payments.*

ii. P.E.I. Personal Income Per Capita

Personal income per person has increased from $2,170 in 1971 to $4,650 in 1976 - comprised of an increase in earned incomes per capita from $1,732 in 1971 to $3,650 in 1976 and an increase in transfer payments from $438 per capita in 1971 to $1,000 in 1976.

Disposable income per person (total income less taxes), which refers to total income available to the individual to purchase goods and services, increased from $1,884 in 1971 to $3,942 in 1976.**Although it must again be emphasized that structural differences in the P.E.I. economy and in the life-style of P.E.I. compared to the other provinces and Canada imply that relative levels of per capita income do not necessarily reflect relative levels of development, nevertheless these comparisons do provide an indication of the extent to which income disparity is being reduced.

Personal income per capita in P.E.I. grew at a faster rate (16.5% compound annual) during this period than did per capita incomes in the other Maritime Provinces and Canada as a whole, resulting in a narrowing of the income 'gaps'.

Although starting from a lower base level than did the other Maritime Provinces, P.E.I. did experience the greatest percentage-point gains.

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* Source: based on Statistics Canada 13 - 201

** In real 1971 terms this represents an increase to $2,720 1971 dollars or a real increase in per capita spending power of $836.

Table 1: P.E.I. PER CAPITA PERSONAL INCOME COMPARISONS

	P.E.I.	N.S.	N.B.	NFLD.	CANADA
	$	$	$	$	$
1971	2,170	2,662	2,482	2,190	3,435
1976	4,650	5,313	5,064	4,603	6,742

Source: Statistics Canada 13-201

Table 2: P.E.I. PER CAPITA PERSONAL INCOMES AS PERCENTAGE OF CANADIAN AVERAGE

	Personal Income	Earned Income	Disposable Income
1971	63.1	56.7	67.8
1976	69.0	61.9	72.3

Source: Based on Statistics Canada

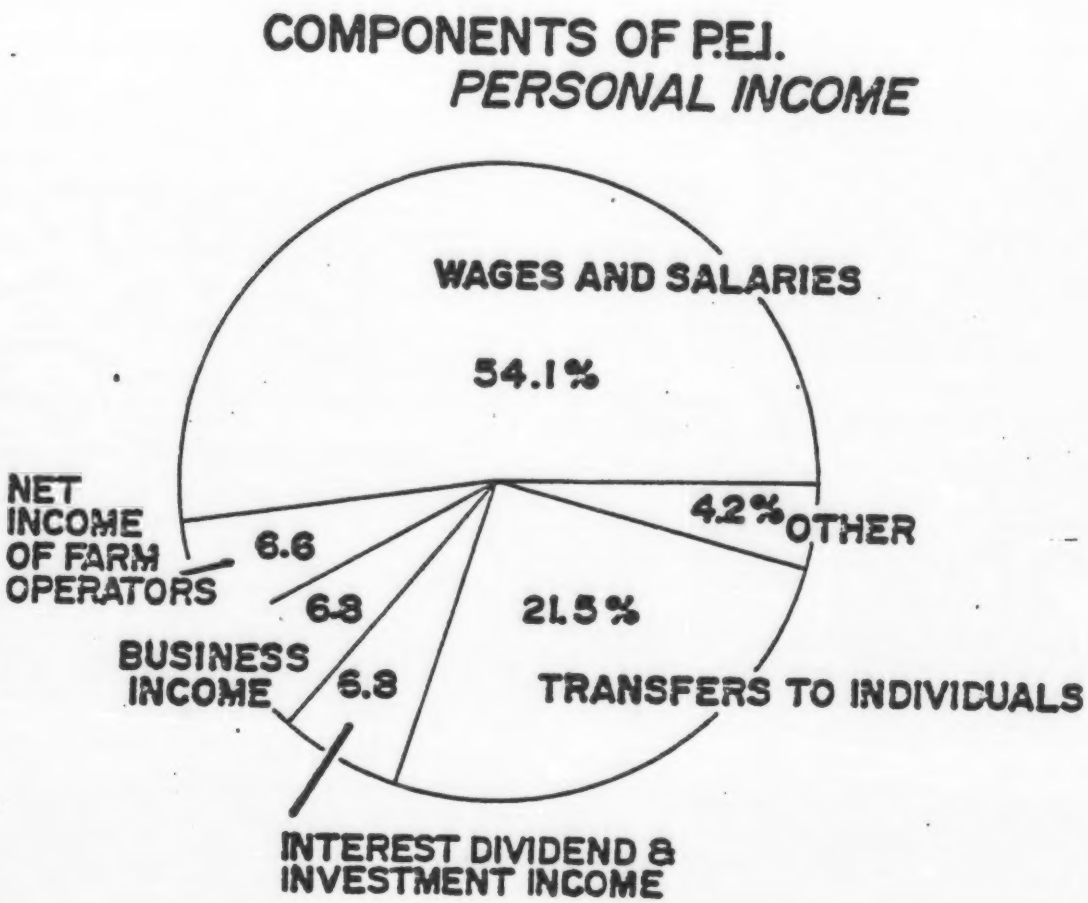
Despite the significant improvements which have occurred in terms of personal income, per capita income in P.E.I. is lower than every Canadian province except Newfoundland.

iii. Components of P.E.I. Personal Income

An examination of the sources of P.E.I. personal income indicates that wages and salaries accounted, in 1976 for more than half of personal income.

Wages and salaries and transfers to individuals together accounted for over three quarters of personal income.

GRAPH 1



The following table indicates the composition of total personal income and the growth rates of its components for the 1971-1976 period.

- Wages, salaries and supplementary labour income have increased steadily but at a slightly lower rate than did total personal income.

- Net income of farm operators was characterized by extreme year-to-year variations, such that the growth rate figure is rather meaningless.*

- Interest, dividend and investment income, and government transfers increased more rapidly than did total personal income, whereas business income grew relatively very slowly.

Table: 3

COMPONENTS OF TOTAL P.E.I. PERSONAL INCOME
1971 - 1976
$

	1971	1972	1973	1974	1975	1976	Compound rate of growth %
Total Personal Income	243	287	355	398	486	558	18.2
Wages, Salaries & Supplementary Labour Income	134	148	183	215	262	302	16.7
Net Income of Farm Operators	4	13	29	14	32	37	45.4
Net Income of non-farm unincorporated business	27	28	32	32	35	38	7.0
Interest, dividend & Miscellaneous investment income	14	19	23	29	31	38	21.1
Government Transfers	49	63	70	87	104	120	19.4

SOURCE: Statistics Canada 13 - 201

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* Net Income of Farm Operators as measured for National Income purposes differs significantly from the Total Net Income estimate published by the Agriculture Division of Statistics Canada, due to a different method of taking into account inventory change.

Comparison of the composition of P.E.I. personal incomes with that of the other Maritime Provinces and Canada reflect the significant structural differences which exist in our economies. In particular, wages and salaries account for a relatively much smaller proportion of P.E.I. personal incomes, mainly as a result of the relatively small size of our secondary industry base. Income of farm operators, on the other hand, is of much greater relative importance to P.E.I., and indeed, also probably indirectly generates a significant share of the Province's wage and salary income. Government transfers, which are inversely related to income levels are therefore also of greater relative importance to P.E.I.

Table: 4
COMPARISON OF THE COMPONENTS OF PERSONAL INCOME
MARITIME PROVINCES AND CANADA

	1976 (%)			
	P.E.I.	N.B.	N.S.	CANADA
Wages, Salaries and Supplementary Labour Income	54.1	65	63.1	69.1
Net Income of Farm Operators	6.6	.62	.32	1.9
Net Income of Non-Farm Unincorporated business	6.8	4.9	5.6	5.5
Interest, Dividend & Miscellaneous Investment Income	6.8	6.7	7.6	9.5
Government Transfers	21.5	20.1	16.9	12.5
Other				

SOURCE: Based on Statistics Canada 13 - 201

Comparison of the levels of major components of per capita personal income in P.E.I. and Canada also reflect the structural differences in the P.E.I. economy.

Table: 5
COMPARISON OF PER CAPITA COMPONENTS
OF
PERSONAL INCOME, P.E.I. AND CANADA

1976

	P.E.I. $	DIFFERENCE (Canada - P.E.I.) $	P.E.I. as % of Canada	CANADA $
Personal Income	4,650	2,092	69.0	6,742
Wages & Salaries & Supplementary Labour Income	2,517	2,140	54.1	4,657
Net Income of Farm Operators	308	173	229.0	135.0
Net Income of Non-Farm Unincorporated Business	317	56	85.0	373.0
Interest, Dividend & Investment Income	317	326	49.0	643.0
Government Transfers	1,000	168	119.0	842.0

SOURCE: Department of Finance, Regional and Sectoral Analysis Division, Historical tables based on National Income Accounts.

Therefore, although P.E.I. per capita incomes have improved, their level remains low, both in absolute and in relative terms. Due to the significant structural differences in the Province's economy and way of life, it is probably not realistic to expect that P.E.I.'s percapita incomes can become equal to the Canadian average. Furthermore, it is most important that the tradeoffs between objectives of increased per capita income as compared to improvements in income distribution, employment and other economic and social concerns be examined.

2. THE DISTRIBUTION OF P.E.I. INCOME

The pattern of income distribution and the extent to which a more equal income distribution has been achieved, is an important development indicator since it measures the degree to which the benefits of economic growth have accrued to various segments of the population. The objective of improving income distribution is more complex in terms of developing appropriate strategies and it is not necessarily consistent with the objective of raising per capita incomes, which has, to date, been a focus of the Province's development plan.

i) Incomes of Family Units - Quintile Shares

Table 6 provides a comparison of the shares of total income received by the Province's family units in 1971 and 1975.* This data suggests that the pattern of income distribution in the Province has improved somewhat since 1971. The lowest fifth of family units have increased their share of total income from 4.7% to 5% while the next lowest fifth have increased their share from 10.5% to 11%, and whereas the shares received by the highest fifth has declined slightly.

This is about the same degree of improvement as has occurred in the distribution of Canadian income.

There are a number of factors which have contributed to the increased share of the lowest forty-percent of recipients. Two of the most important are the increased level of transfer payments and the increase in the number of secondary earners in the Province's families. In 1971 the composition of family units was 23,000 families and 8,000 unattached individuals whereas in 1975 the composition was 26,000 families and 8,000 unattached individuals. Since families usually have higher incomes and a

* Family units refers to families and unattached individuals. This data is based on th Survey of Consumer Finances and therefore does not necessarily correspond with 1971 census data on income distribution. The 1971 Census indicated that P.E.I. had the most uneven income distribution in Canada.

more even income distribution, this also contributed to the improvement. (The mean incomes of families increased from $6,750 to $12,372, during this period, whereas the mean incomes of unattached individuals increased from $3,352 to $5,742.)

TABLE 6
QUINTILE INCOME SHARE OF
P.E.I. FAMILY UNITS
1971 and 1975

Quintiles		1971 % Share	1975 % Share
lowest fifth	1	4.7	5.0
	2	10.5	11.0
	3	16.8	17.0
	4	25.9	25.0
highest	5	42.1	42.0

SOURCE: Based on Survey of Consumer Finances, 1971 & 1975.

Although the distribution of income has improved somewhat, the disparities between low-income groups in the Province and high-income groups are very wide. The following table indicates, rather than the share of total income, the distribution of family units according to income level and therefore illustrates income disparity between income groups. The 1975 income intervals have been converted to new intervals, equivalent to 1971 in terms of real purchasing power. (therefore correcting only for inflation and not for the overall increases in income levels.)*

This table indicates that, due to improvements in average levels of income, the proportion of family units receiving very low incomes has declined and the proportion in the high income groups has increased. However, still in 1975 over one-quarter of the Province's family units received less than $5,600 income, and more than half of the Province's family units received less than $10,000 (whereas the top fifth of family units received more than $16,800 and the top 9.6% received more than $21,000.)

* This conversion assumed an equal distribution of income recipients throughout the income ranges.

TABLE 7
PERCENTAGE DISTRIBUTION OF
FAMILIES AND UNATTACHED INDIVIDUALS
1971 and 1975

	1971		1975
Under $ 2,000	18.5	Under $ 2,800	10.8
2,000- 3,000	10.3	2,800- 4,200	7.8
3,000- 4,000	12.2	4,200- 5,600	9.5
4,000- 5,000	10.6	5,600- 7,000	8.4
5,000- 6,000	8.4	7,000- 8,400	8.3
6,000- 7,000	7.6	8,400- 9,800	9.3
7,000- 8,000	5.1	9,800-11,200	7.0
8,000- 9,000	6.6	11,200-12,600	6.1
9,000-10,000	7.1	12,600-14,000	5.1
10,000-12,000	7.3	14,000-16,800	8.1
12,000-15,000	3.5	16,800-21,000	10.0
15,000 & over	2.6	21,000 & over	9.6

SOURCE: Based on Statistics Canada, Survey of Consumer Fiannces 13-206, 13-207

ii) Family Incomes

As referred to above, the distribution of families by income groups has shifted upward significantly. It is suggested that this is due importantly to the increased participation of females in the labour force. However, despite the increase of mean family income from $6,750 to $12,372, average family incomes in P.E.I. remained the lowest in Canada.

TABLE 8
PERCENTAGE DISTRIBUTION OF P.E.I. FAMILIES
BY
INCOME GROUPS
1971 & 1975

1971			1975		
Income Group	%	Cumulative %	Income Group	%	Cumulative %
Under 2000	5.8	5.8	Under 2800	4.3	4.3
2000-3000	11.1	16.9	2800-4200	4.9	9.2
3000-4000	13.9	30.8	4200-5600	8.2	17.4
4000-5000	13.0	43.8	5600-7000	8.1	25.5
5000-6000	8.7	52.5	7000-8400	8.5	34
6000-7000	8.2	60.7	8400-9800	10.2	44.2
7000-8000	6.9	67.6	9800-11,200	8.2	52.4
8000-9000	8.1	75.7	11,200-12,600	7.3	59.7
9000-10,000	9.0	84.7	12,600-14,000	6.8	66.5
10,000-12,000	6.9	91.6	14,000-16,800	9.0	75.5
12,000-15,000	4.8	96.4	16,800-21,000	9.9	85.4
15,000 & over	3.5	99.8	21,000 & over	14.6	100.0
Average Family Income $6750			Average Family Income $12,372		
% of Canadian 65%			% of Canadian 74.5%		

SOURCE: Statistics Canada 13 - 206, 13 - 207

iii) Wage and Salary Earners

Examination of the incomes of wage and salary earners also indicates a decline in the proportion of individuals in the low-income brackets and an increase in the higher-income brackets. These changes could however, be due in large part to improvement in wage and salary levels rather than any major changes in industry structure. The fact that, in 1975 almost one quarter (23.3%) of wage and salary earners received less than $2,100 total income and almost one-half (1/2) received less than $5,600, indicates the continuing heavy dependency upon seasonal and low-paying occupations.

TABLE 9

PERCENTAGE DISTRIBUTION OF INDIVIDUALS WHOSE MAJOR SOURCE OF INCOME IS WAGES AND SALARIES BY INCOME GROUPS 1971 & 1975

1971			1975		
Income Group	%	Cumulative %	Income Group	%	Cumulative %
Under 500	16.1	16.1	Under 700	9.5	9.5
500-1000	9.2	25.3	700-1400	7.4	16.9
1000-1500	8.7	34.0	1400-2100	6.4	23.3
1500-2000	6.6	40.6	2100-2800	4.3	27.6
2000-3000	11.0	51.6	2800-4200	9.8	37.4
3000-4000	11.2	62.8	4200-5600	11.4	48.8
4000-5000	12.8	75.6	5600-7000	11.3	60.1
5000-6000	7.1	82.7	7000-8400	9.9	70.0
6000-7000	5.7	88.4	8400-9800	7.6	77.6
7000-8000	2.0	90.4	9800-11,200	4.7	82.3
8000-10,000	5.1	95.5	11,200-14,000	8.3	90.6
10,000 & over	4.3	99.8	14,000 & over	9.5	100.1
Average Income $3459			Average Income $7241		
% of Canadian 55.8%			% of Canadian 66.6%		

SOURCE: Statistics Canada 13 - 206, 13 - 207

In order to gain a greater understanding of the factors affecting the distribution of income, there are a number of questions which merit further study.

1. What has been the relative impact of increases in transfer payments and increased numbers of secondary family earners in terms of contributing to the changes in income disbribution?
2. What are the characteristics and composition of the lowest fifth of income recipients - for example - does this group include: pensioners, unemployed youth, individuals with low educational levels, the working poor, etc.?
3. What proportion recipients of low income are attached to the labour market? How do programs geared towards members of the labour force affect low-income people?
4. Do measures to enhance economic growth in fact improve conditions for low-income people and contribute to the attainment of a more equal income distribution?

These questions suggest that it should be an important developmental concern to examine the structure and characteristics of the low-income groups and to determine the extent to which certain developmental efforts can be directed towards low-income groups to improve their incomes, and their access to a greater share of the benefits of economic development.

iv) Taxation Data

Taxation data does not provide a very satisfactory indication of income distribution due to a number of "distortions" such as: students entering the labour force for periods of the year, the fact that very low income people are not taxed, under-filing and underclaration by certain categories of recipients, etc.

Nevertheless, bearing in mind these limitations it still does provide some useful indication of income distribution,

income disparity and the role of various sectors in terms of income shares.

1. Overall Level of Income and Taxes

In 1971 there were 39,234 returns filed, of which 24,049 were taxable. Total income was 153.1 million, of which 133.6 million was taxable - total tax payable was 19.3 million. In 1975, there were 51,833 returns filed, of which 40,216 were taxable. Total income was 363.3 million of which 340.6 million was taxable and total tax payable was 44.5 million.

2. Income Distribution - all Taxable Returns

The following table indicates that, based on 1975 taxable returns:

(i) the lowest 29% of the recipients received approximately 13% of the income.

(ii) the lowest 73% of recipients received approximately half (1/2) of the income.

(iii) the highest 9% of the recipients received almost one quarter (24.2%) of the income.

(iv) The highest 2% of the recipients received over 9% of the income

TABLE 10

P.E.I. INCOME DISTRIBUTION - 1975

Income Class	#	% Recipients	% Income	Cumulative Recipients	Cumulative Income
less than 5000	11,735	29.2	12.7	29.2	12.7
5000-10,000	17,591	43.7	37.1	72.9	49.8
10,000-15,000	7,282	18.1	25.9	91.0	75.6
15,000-20,000	2,047	5.1	10.1	96.1	85.7
20,000-25,000	743	1.8	4.8	97.9	90.5
25,000 & over	818	2.0	9.3	99.9	99.8
TOTAL	40,216				

SOURCE: Revenue Canada, Taxation Statistics, 1977 Edition
Calculations based on Table 8

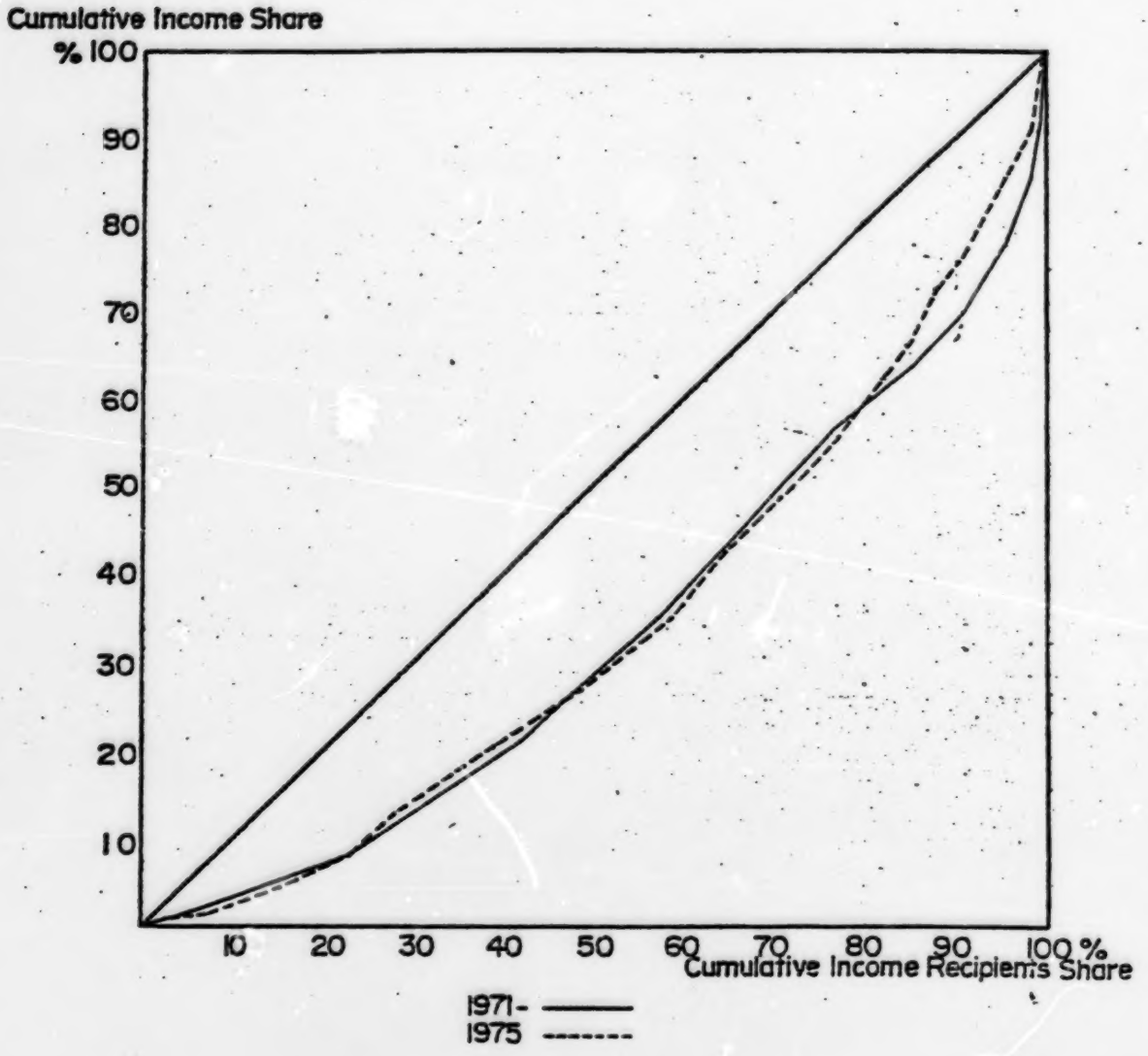
The following graph provides a measure of the equality of income distribution in the Province. The 45° line would be an equal income distribution. The greater is the distance from the actual to this line, the more unequal is the income distribution.

The 1975 income distribution was not consistently closer to the 45° line. Although the total area from the 45° line is somewhat smaller in 1975 the graph suggests that only very marginal improvements in income distribution have been achieved.

GRAPH 2

DISTRIBUTION OF TAXABLE RETURNS

COMPARISON OF 1971 and 1975



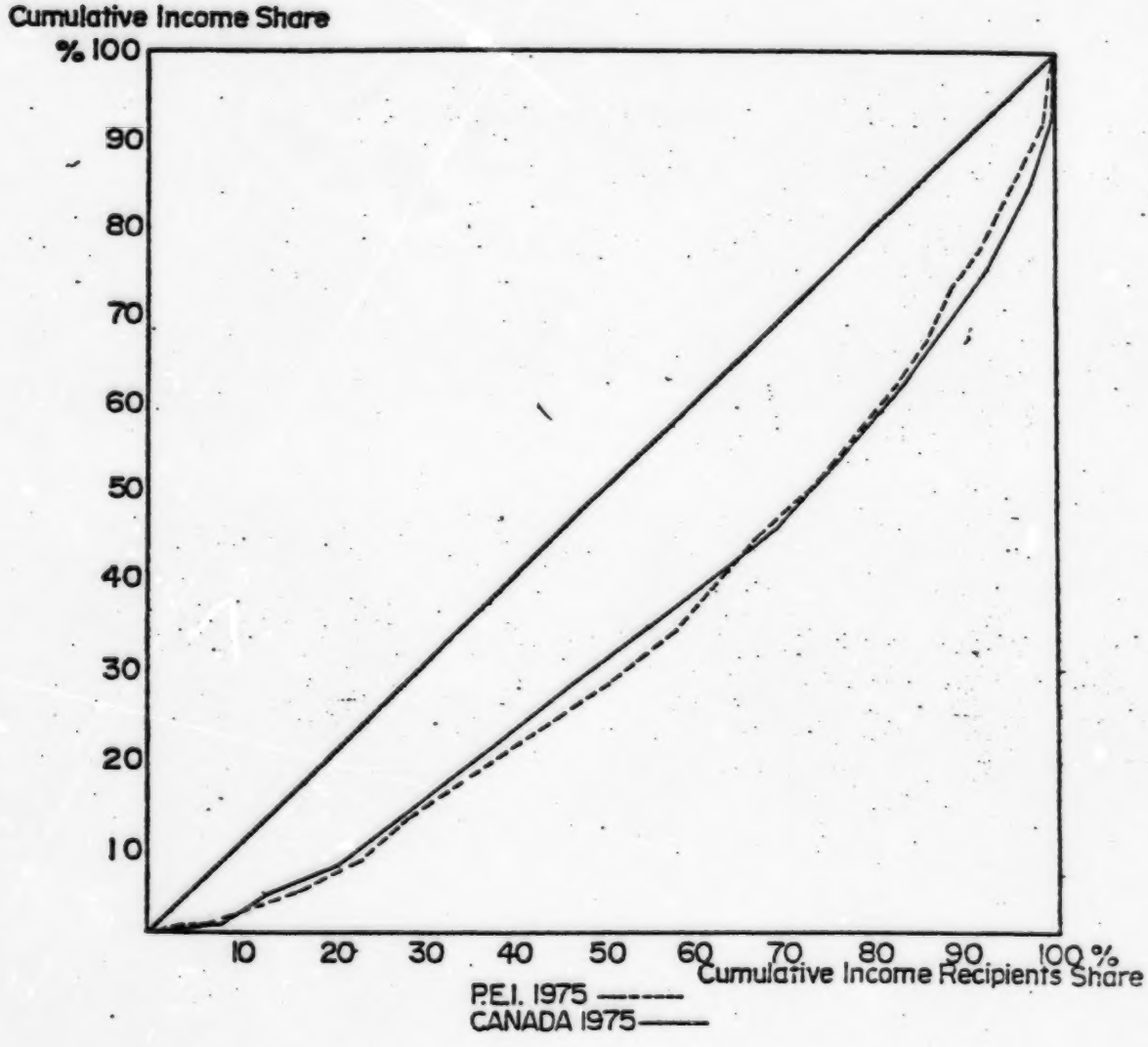
SOURCE: Based on Revenue Canada, Taxation Statistics, 1973 & 1977 editions

3. Income Distribution - P.E.I. and Canada

A comparison of the income distributions of P.E.I. and Canada for 1975 indicate that, while the income shares accounted for by the lowest tenth of income recipients are approximately the same, the lowest sixty-five to seventy percent of P.E.I.'s income earners receive a lower proportion of total incomes than is the case for Canada as a whole.

GRAPH 3

COMPARISON OF P.E.I. AND CANADIAN INCOME DISTRIBUTIONS, 1975



SOURCE: Based on Revenue Canada, Taxation Statistics, 1977 Edition

4. Income Distribution by County

There is considerable variation in the pattern of income distribution in various areas of the Province. Over half of the declared income was received by Queens County residents and almost one-third (1/3) of the Province's income was received by Charlottetown residents. The incidence of low incomes was the highest in Kings County, where over half the recipients received less than $5,000 and only 13% earned over $10,000.

The proportion of recipients in Queens County and Charlottetown in particular, receiving low incomes was smaller, and a significantly higher proportion received over $10,000. The differences in income distribution patterns between counties reflect the existence of larger urban areas and more active farming areas in Queens County and in Prince County.

TABLE 11

PERCENTAGE DISTRIBUTION OF INCOME BY COUNTY

1975

Income Group	Kings	Prince	Queens	Charlottetown
Less than 3000	25.2	25	21.6	20.5
3000-5000	27.4	21.3	18.3	17.5
5000-7000	17.4	17.1	17.5	16.6
7000-10,000	16.7	16.5	18.6	19.6
10,000-15,000	9.6	14.2	15.3	15.1
15,000 & over	3.6	5.9	8.7	10.6
% of Total Returns:	14.4	36.3	49.3	26.8
% of Total Income:	12.0	34.7	53.3	31.2

SOURCE: Based on Revenue Canada, Taxation Statistics, 1977 Edition

5. Occupational Distribution of Income

The following table indicates the number of individuals filing taxable returns and the proportion of total taxable returns, taxable income and income tax paid by several occupational groups in 1975.

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Employees of business accounted for by far the greatest proportion of taxable income.

Government employees accounted for the second largest share of incomes and returns. The taxation data does, however, understate the numbers of recipients and incomes received by the primary sectors.

TABLE 12
P.E.I. INCOME DISTRIBUTION BY OCCUPATION CATEGORY
1975

	NO. OF TAXABLE RETURNS	% OF TOTAL	% OF TOTAL TAXABLE INCOME	% OF TOTAL TAX
Employees of Business	17,826	44.3	44.5	44.2
Employees of Institutions/ Teachers/Professors	3,836	9.5	10.0	9.7
Federal, Provincial & Municipal	6,557	16.3	19.5	20.0
Other	2,584	6.4	7.1	7.2
TOTAL EMPLOYEES	30,803	76.6	81.0	81.1
Farmers	1,170	2.9	2.9	2.8
Fishermen	1,054	2.6	1.2	.8
Professionals	256	.63	3.0	5.1
Salesmen	107	.3	.3	.3
Business Proprietors	1,620	4	4.5	4.8
Total Investment	957	2.4	2.9	2.5
Pensioners	1,012	2.5	1.3	1.0

SOURCE: Revenue Canada, Taxation Statistics, 1977 Edition.

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II. P.E.I.'s POPULATION, LABOUR FORCE AND EMPLOYMENT

i) Introduction:

Changing trends in the size and structure of the Province's population, labour force and employment are of utmost significance both for the formulation of broad development strategy and for sectoral planning. More productive utilization of the Province's human resource base is a basic requirement for future development.

Accordingly, this analysis devotes considerable emphasis to the identification of those major trends relevant for development planning.

1. POPULATION

i) Population Growth and Migration Trends

The 1971-1977 period has been one of rapid population growth relative to the 1960's.

The absolute decline in the annual number of births* has been more than offset by a reversal in migration patterns: In each of the 1961-1966 and 1966-1971 periods, P.E.I. experienced a net outmigration to other parts of Canada of almost three thousand, whereas, in the 1971-1977 period, the Province was a 'net importer' of over five thousand people from other provinces.**

Table 13

POPULATION GROWTH
1961 - 1977

	Size of Population ('000)	Net Increase ('000)	Net Migration from Other Provinces
1961	104.6	-	
1966			- 2,970
1966	108.5	3.9	
1971			- 2,763
1971	111.6	3.1	
1976			+ 3,754
1976	118.2	6.6	
1977	121.0	2.8	+ 1,314

Source: Statistics Canada 9, - 201, 91 - 208

* The number of births declined from 2,838 in 1961 to 2,103 in 1971 and 1,936 in 1976.

** Figures on net migration from other countries are not available.

This reversal in migration patterns is the result of a combination of two factors - the net influence of each is difficult to separate. On the one hand, the fact that P.E.I. was a net importer of people in recent years is indicative of improvements in the economic situation and employment prospects in the Province during this period. In particular, significant activity and expansion occurred in the services sector in general, in the government sector and in construction activity. On the other hand, during this period, unemployment rates in areas where Islanders hve tradionally migrated increased, and job opportunities were fewer. High unemployment rates in other parts of Canada normally result in the return home of Prince Edward Islanders, while, at the same time, discouraging would-be out-migrants. These influences can also result in greater pressure on the Province's job market and increased unemployment.

The following table shows the migration patterns, by Province of origin to P.E.I. and by Province of destination of P.E.I. out-migrants. Of particular significance compared to earlier years, is the large net in-migration from Ontario and the fact that Alberta has become the 'new frontier' for the Province's out-migrants.

Table 14
PRINCE EDWARD ISLAND MIGRATION PATTERNS
1971 - 1976

	Nfld.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yuk.	Total
In-migration FROM	819	4,934	3,664	1,581	9,111	891	276	1,101	748	81	23,206
Out-Migration TO	689	4,531	3,170	922	6,478	720	254	1,638	929	120	19,452
Net In-Migration	130	403	494	659	2,633	171	22	- 537	-181	- 39	3,754

SOURCE: Statistics Canada - 91-208

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Of greater importance than the absolute numbers, however, are the characteristics of in-migrants and out-migrants and how these affect the quality of the labour force and the structure of the labour market. If the Province is, for example, continuing to 'export' a disproportionately large share of its young, trained individuals to other Province's while importing a combination of upper-level employees and low-skilled people from other provinces, this could distort the Province's labour market. While information on the characteristics of in and out-migrants is limited, this is an area which is important to the Province's labour market and employment and accordingly merits analysis.

ii) Population Distribution

Changes in the locational distribution of the Province's population are relevant to the formulation of a spatial development strategy, including strategies for rural development. Shifts in population distribution are also resulting in changes in the labour market, particularly in the pattern of labour supply.

The most significant growth in population during the 1971-1976 period occurred in Queens County, which experienced a population increase of greater than 5,000. The population of Prince County increased by more than 1,000, while the population of Kings County increased only slightly.

Table 15
POPULATION BY COUNTY

	KINGS	PRINCE	QUEENS
1971	18,424	42,082	51,135
1976	18,578	43,237	56,414

Source: 1976 Census of Population

The decline which occurred in the population size of the 'town proper' of both Charlottetown and Summerside was accompanied by a large increase in the surrounding suburban areas.

Table 16
POPULATION
MAJOR URBAN AND SURROUNDING SUBURBAN AREAS

	1971	1976
Charlottetown (proper)	19,133	17,063
Charlottetown Suburbs*	9,087	13,761
Total	28,220	30,824
Summerside (proper)	9,439	8,592
Summerside Suburbs*	4,552	5,988
Total	13,991	14,580

Source: 1976 Census of Population

The census defines as urban all those areas of 1,000 or more inhabitants. The overall urban population of the Provinces increased in total by only 440 inhabitants, while the population in rural areas increased by more than 6,000. This differed from the previous five year period, when all of the population increase occurred in the urban areas.

Therefore, despite the population increase which occurred in the suburbs, when all the urban areas, including Charlottetown, Summerside, the major suburbs and small towns are taken into account, the net urban growth was very small relative to the rural growth. (Refer to page 24.)

* CHARLOTTETOWN SUBURBS

	1971	1977
Southport	363	1,009
Sherwood	3,807	5,602
Parkdale	2,313	2,172
Bunbury	526	759
East & West Royalty	1,418	2,963
Cornwall	657	1,256

SUMMERSIDE SUBURBS

	1971	1977
Wilmot	737	1,183
St. Eleanors	1,621	2,495
Sherbrooke & Linkletter	2,194	2,310

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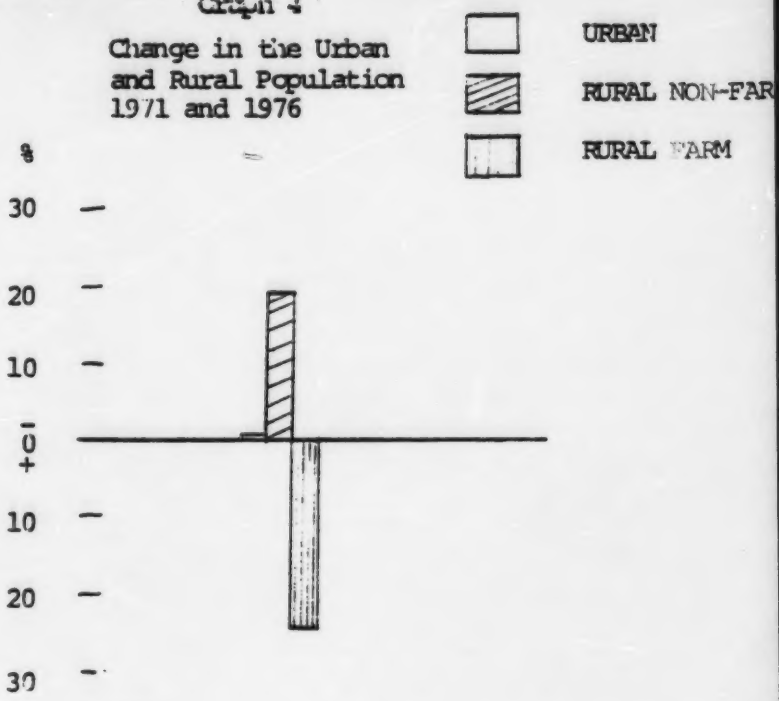
Table 17
URBAN/RURAL POPULATION DISTRIBUTION
1971 and 1976

	1971	1976
Urban	43,440	43,880
Rural	69,200	74,350
Farm	16,115**	12,190**
Non-Farm	52,085	62,155

SOURCE: 1976 Census of Population
92-807

Graph 4
Change in the Urban and Rural Population 1971 and 1976



Of critical importance from a policy and planning viewpoint, is the further decline in farm population by almost 4,000 - ie. almost one quarter, resulting from the combined effects of a reduction in the number of census farm units (from 3,462 to 3,054) and the fact that farm youth have continued to leave the farm to seek employment in other occupations and in other areas.

Therefore, the key industry of the Province continues to lose people at a rapid rate. Analysis should be carried out with respect to the factors underlying this continuing loss of farm population and the type of employment and economic situation experienced by the individuals who leave the sector.

The decline in rural farm population was accompanied by an increase of more than 10,000 in the rural, non-farm population

** Based on definition of a census farm unit as having sales of $1,200 or more.

At the same time, most of the Province's smaller towns and larger villages experienced in some cases only very marginal population growth, and in other cases, population declines.*

The rural non-farm population increase has been heavily based on ribbon housing development and small sub-divisions. A large proportion of this population is employed in Charlottetown and Summerside. It is questionable whether the rapid development of non-farm rural areas combined with the slow growth of small towns represents efficient land use. Furthermore, the slow growth of small towns suggests that these areas are definitely not experiencing economic development.

At the same time, many of the major government capital infrastructure projects have been located in rural areas with relatively small populations, thereby reinforcing to a certain extent, the decline of the small towns.

These trends suggest that the shift to rural non-farm areas should be examined and that a strategy for development of the smaller towns should be formulated.

iii) Population - Age Structure

The age structure of the Province's population has altered somewhat since 1971, resulting from a combination of factors including the decline in the number of births, the

* Examples of these are indicated in the following table:

Table 18 POPULATION - P.E.I. SMALL TOWNS

	1971	1976
Alberton	973	1,062
Borden	624	589
Georgetown	767	732
Kensington	1,086	1,150
Montague	1,608	1,827
O'Leary		
Parkdale	2,313	2,172
Souris	1,393	1,447
Tignish	1,060	1,077

Source: 1976 Census of Population

positive net in-migration to the Province, and the fact that the postwar baby-boom population is now in the 25-34 age group.

The following table shows the size and proportion of P.E.I.'s population by age groups and provides a comparison of the P.E.I. and Canadian age distribution patterns.

Table 19
COMPARISON OF P.E.I. AND CANADIAN AGE STRUCTURE
1971 and 1976

	1971			1976		
	P.E.I.	P.E.I.	CANADA	P.E.I.	P.E.I.	CANADA
	#('000)	%	%	#('000)	%	%
0-14	35.4	31.8	29.6	33.2	28.1	25.6
15-19	11.6	10.4	9.8	12.9	10.9	10.2
20-24	9.2	8.2	8.8	10.0	8.5	9.3
25-34	12.1	10.8	13.4	16.3	13.8	15.7
35-39	5.6	5.0	5.9	5.9	5.1	5.8
40-54	15.8	14.1	16.5	16.2	13.4	16.3
55-65	9.6	8.6	8.0	10.4	9.8	8.4
65+	12.3	11.0	8.1	13.3	11.2	8.7
	111.6			118.2		

Source: 1976 Census of Population, 92-823

Between 1971 and 1976 a decline occurred in the number and proportion of the population in the young dependent age groups, while the size of the population in the older dependent age groups (65+) slightly increased. These trends should continue in the longer-term. Relative to Canada, P.E.I. continues to have a larger proportion of its population in the dependent age groups and a smaller proportion in the productive age groups.

However, the size and proportion of P.E.I.'s population in the productive age category 15-65, has increased.

In particular, the Province has experienced a very significant increase in the size and proportion of its population in the young, productive 25-34 year age group.

These age-group trends have a number of important implications:

1. The fact that the 25-34 age group has increased in size has resulted in an expansion in labour force participation and in the size of the labour force and therefore, increased pressure on the labour market.

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2. The fact that very young age groups are declining in size could have the long-term effect of a decline in the size of the Province's productive age groups and in the supply of labour.
3. The fact that P.E.I. has a higher percentage of its population in the dependent age group means that its personal income tax base is proportionately smaller.
4. In the longer term, the Province will have to support an increasingly larger older population.

The following section will examine the implications of the increased size of the working age population in terms of labour force and employment trends.

2. LABOUR FORCE AND EMPLOYMENT

i) General Labour Force Trends

The size of the Province's population in the working age groups (defined by Statistics Canada as 15 and over) increased by 14 thousand between 1971 and 1977. The size of the Province's labour force increased by 10 thousand during the same period. Participation rates and employment levels have increased since 1972.

This increase in the size of, and in the participation rate in the labour force has resulted from a set of economic, social and demographic changes which have occurred in the Province in recent years. For example, the influencing factors have included: the shift of population off the farm, the increased cost of living, combined with rising expectations and the resulting increased participation in the labour force by women and secondary earners in general, the increased size of the population in the most productive of the working age groups, the migration back to P.E.I. when employment opportunities declined elsewhere, and increased available employment opportunities in the Province. Furthermore, labour force participation in such a small economy is very sensitive to slight modifications in employment and wage policies and changes in the economic situation. Although the role of these various factors cannot be isolated in this analysis, recognition of their complexity implies that one must be cautious in concluding that increases in the size of the labour force and in participation rates are necessarily indicative of economic development. However, their increase is definitely a positive sign since the size of the potentially-productive human resource base has increased, and more productive utilization of this human resource base will contribute to economic development. Similarly, the sensitivity of labour force participation means that it is extremely difficult to project (within any reasonable degree of accuracy) the future size of the Province's labour force.

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Table 20
WORKING AGE POPULATION, LABOUR FORCE, EMPLOYMENT

	1971	1972	1973	1974	1975	1976	1977
Population 15+ ('000)	74	76	78	80	83	85	88
Labour Force ('000)	40	41	43	45	47	49	50
Participation rate (%)	54.1	53.9	55.1	56.3	56.6	57.0	57.3
Employed ('000)	38	37	40	41	43	44	45

SOURCE: Statistics Canada, 71 - 001 Revised Labour Force Survey

ii) Labour Force Participation
Age and Sex Sub-Groups

In recent years there has been a trend of increasing participation of women and young people in the labour force. Due, however to a major revision in the labour force survey in 1975, it is not possible to draw very accurate comparisons for the entire period.

The Table below indicates Labour Force and participation rates by age for 1971 and 1975 - based on the earlier Labour Force Survey, and for 1975 and 1977 based on the Revised Labour Force Survey.

The data indicates an increasing trend towards a greater number of teenagers in the labour force. This trend may now be levelling off. The numbers and participation rates of the younger members of the labour force - 20-34, also increased during the same period (these trends can be attributed to the combined effects of the post-war baby-boom and the reversal of the migration pattern).

Table 21
LABOUR FORCE AND PARTICIPATION RATES
BY AGE - P.E.I.
1971, 1975, 1977

	1971		1975		1975		1977	
Both Sexes	# ('000)	Part rate (%)	# ('000)	Part rate (%)	# ('000)	Part rate (%)	# ('000)	Part rate (%)
Total	39	52.7	46	55.4	47	56.6	50	57.3
15-19	4	33.3	6	46.2	7	51.6	7	50.3
20-24	6	66.7	8	72.7	8	73.1	9	74.7
25-34	8	66.7	10	66.7	11	69.9	13	72.9
35-44	7	70.0	8	72.7	7	65.7	8	72.9
45-54	7	70.0	7	70.0	7	69.5	7	67.2
55-64	6	60.0	5	50.0	6	56.5	5	50.5

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Source: Stats Can. Labour Force Survey (1971 Revision)-Revised Labour Force Survey Revision
Source: Stats. Can. (1975

The table below indicates that proportionately, the number of women and participation rates of women in the labour force have increased dramatically in the past decade.

Approximately two-thirds of the overall increase in average labour force size has been accounted for by the increased participation of women. These figures are also a reflection of the increased size of the province's tertiary sector. It will therefore be important to analyze the types of occupational opportunities and wage and salary levels experienced by new entrants.

Table 22
LABOUR FORCE AND PARTICIPATION

1966, 1971, 1977

	MEN		WOMEN	
	# ('000)	Part Rate (%)	# ('000)	Part Rate (%)
1966	26	76.5	10	28.6
1971	26	70.3	13	34.2
1972	26	70.3	14	35.9
1973	27	71.1	14	35.0
1974	28	71.8	15	36.6
1975	30	75.0	16	37.2
1975	29	72.5	18	41.6
1976	30	72.8	18	42.0
1977	31	72.1	20	43.3

SOURCE: Statistics Canada - Labour Force Survey (1966-1975)
Revised Labour Force Survey (1975)

iii) Overall Levels of Employment and Unemployment

The fact that employment has increased by seven thousand since 1971, indicates that the economy has been able to generate increased employment opportunities. However, it will be important to analyze which sectors and occupations have accounted for this increase, which population groups have benefitted from this increase and what potential exists for generating increased and self-sustaining employment in various sectors.

Despite the fact that signifcant increases in employment levels have occurred, the extent of unemployment and

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unemployment rates have not been reduced.*

This suggests that reduction in unemployment - ie. enabling unemployed individuals to secure productive employment - is an important developmental problem which must be addressed by other measures in addition to job creation, and which requires greater understanding of the characteristics and the operation of the Province's labour market.

Table 23
AVERAGE ANNUAL EMPLOYMENT AND UNEMPLOYMENT
1971 - 1977

	1971	1972	1973	1974	1975	1976	1977
Employed ('000)	38	37	40	41	43	44	45
Unemployed ('000)	3	5	3	3	4	5	5
Unemployment Rate (%)	7.5	12.2	7.0	6.7	8.5	9.8	10

SOURCE: Statistics Canada, Revised Labour Force Survey - 71 - 001

iv) Seasonality in the Labour Market

The Province's labour market continues to be characterized by extreme seasonal variations in participation rates and unemployment levels.

This seasonality is primarily the result of the structural characteristics of the P.E.I. economy with its relatively high dependency on the primary industries, and associated processing activity, and roles of the construction and tourism sectors as employment generators during certain months of the year.

1. Seasonality of labour force participation:

The wide variations in participation rates (of 10-15 percentage points between high and low months) reflect:

a) the swings in demand for labour.

* The incidence of unemployment is particularly high among youth-in 1977 the average unemployment rate in the 15-24 age group was 14.7% and the unemployment rate among women participants was 12.2%.

b) the entry of young people and other individuals into the labour market who desire to work only on a seasonal basis.

The following table indicates that the greatest seasonal variation in labour force participation is accounted for by the 15-24 age groups and by males, and the next table indicates that the variation has not lessened during the 1971-1977 period.

Table 24
LOW AND HIGH PARTICIPATION RATES BY SUB-GROUP OF THE LABOUR FORCE, 1977

	Low (%) Month	High (%) Month	Difference (%)
Total Labour Force	51.1	63.5	12.4
Total Males	64.9	79.4	14.5
Males 15-24	58.1	86.9	28.8
Males 25+	67.8	76.8	9.0
Total Females	38.1	48.8	10.7
Females 15-24	45.3	69.1	23.8
Females 25+	35.2	41.7	6.5

SOURCE: Statistics Canada, Revised Labour Force Survey

Table 25
SEASONALITY OF LABOUR FORCE PARTICIPATION 1971-1977

	Size of Labour Force ('000)				Participation Rates (%)			
	(Mo.) Low	(Mo.) High	Difference		(Mo.) Low	High (Mo.)	Difference	
1971	36	46	10		48.6	62.2	13.6	
1972	37	46	9		49.3	60.5	11.2	
1973	37	49	12		48.1	62.8	14.7	
1974	39	50	11		49.4	61.7	12.3	
1975	41	53	12		50.4	63.9	13.5	
1976	45	54	9		53.4	63.3	9.9	
1977	44	56	12		51.1	63.5	12.4	

SOURCE: Revised Labour Force Survey

In addition, an index of seasonality of labour force participation was computed. Although the long-term data is not strictly comparable the index suggests that seasonality has not been reduced.

SEASONALITY INDEX:	1966	1971	1972	1973	1974	1975	1976	1977
	.0510	.0729	.0730	.0914	.0704	.0822	.0578	.0692

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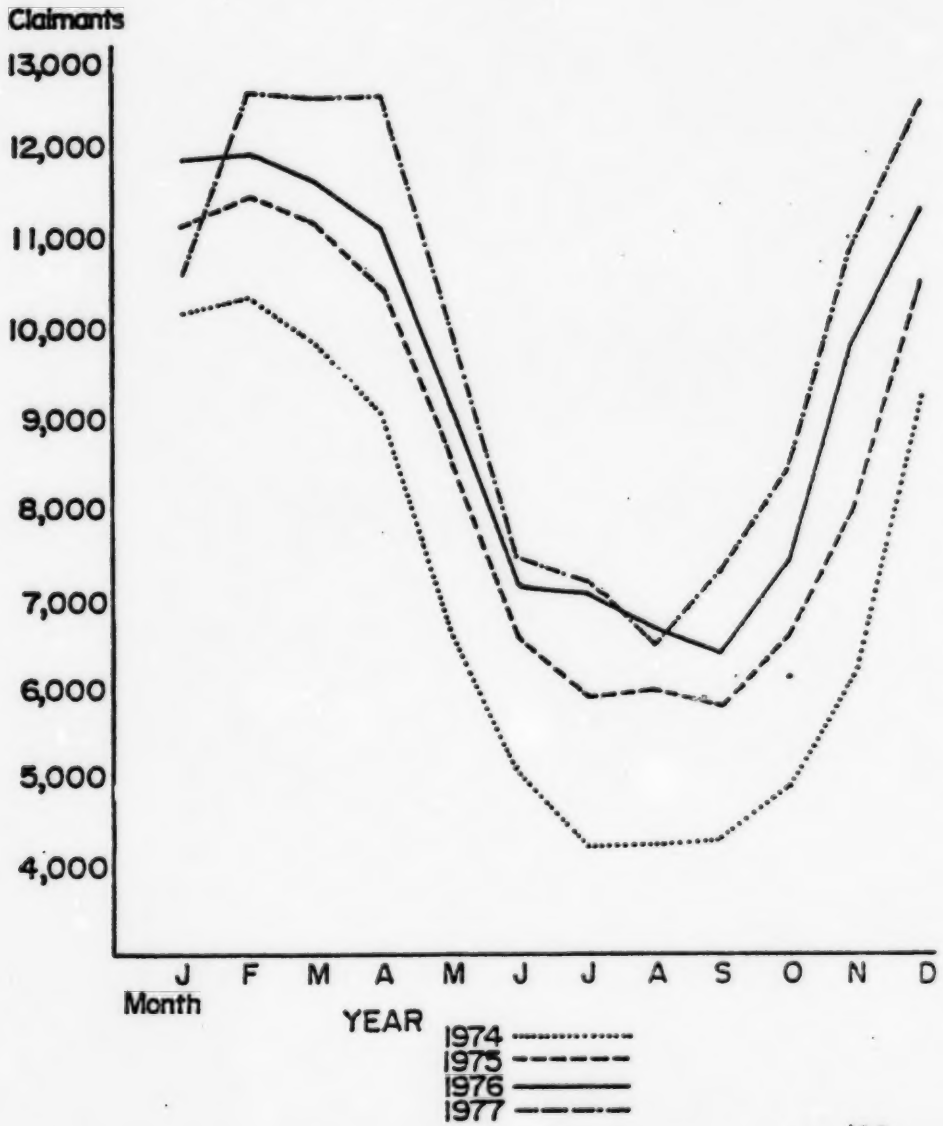
2. Seasonality of Employment:

In 1977, the seasonal variation in employment was 13,000 - employment was 39,000 in January and increased to 52,000 during the peak month of August.

The following graphs, based on unemployment insurance data, illustrate the pattern of seasonal variation in employment. The numbers of claimants (with the exception of the months of January and August, 1977) have increased significantly since 1974, as have the amount of benefits paid.

GRAPH 5
UNEMPLOYMENT INSURANCE CLAIMANTS
1974 - 1977



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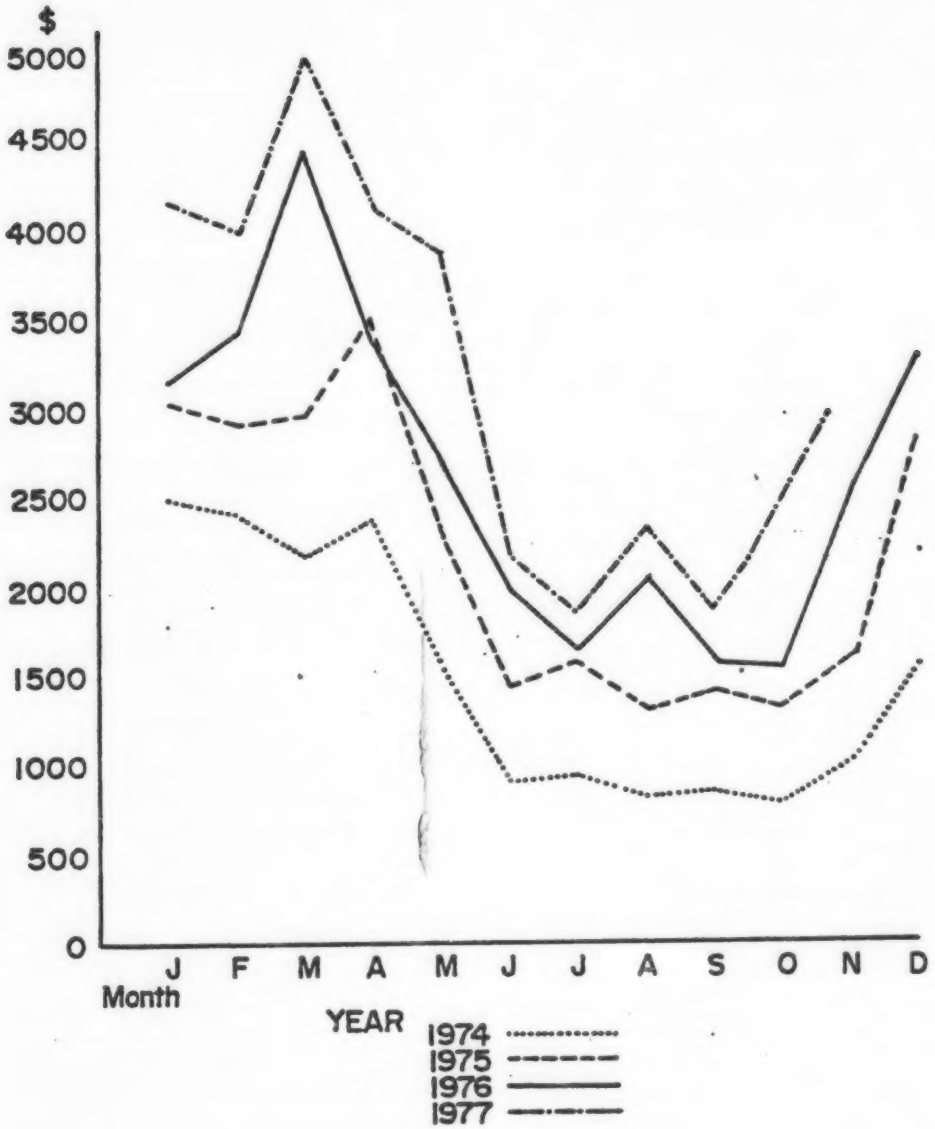
GRAPH 6
UNEMPLOYMENT INSURANCE BENEFITS PAID
TO P.E.I. RESIDENTS-$'000, 1974-1977



Available data on the incidence of seasonality in various sectors and occupations is somewhat limited. The sectoral employment data of the Revised Labour Force Survey suggest that virtually all the sectors of our economy are affected by seasonality.

The following table based on unemployment insurance claimants data for several occupational groups selected on the basis of large seasonal variation in employment for 1976, also indicate that seasonality of employment and unemployment affects a number of sectors and occupations. (Unemployment in the construction trades, however is significantly overstated by the fact that many unskilled, and chronically unemployed individuals seeking employment indicate that they are construction workers)

Table 26
SELECTED OCCUPATIONS
UNEMPLOYMENT INSURANCE CLAIMANTS
1976

	Average Number of Claimants, Low Months	Average Number of Claimants, High Months	Difference	Difference ÷ Average Number of Annual Claiman
1. PRIMARY SECTORS AND PRIMARY - RELATED				
i) General Agriculuture	350.3	867.3	517	.86
ii) General Workers (Farm)	94	246.7	152.7	.93
iii) Field Crop & Vege-table Growing	83.3	244	160.7	.92
iv) Fishermen	139.7	1,260.3	1,120.6	1.77
v) Fish canners, Plant workers	6	123	117	2.51
2. CONSTRUCTION - RELATED TRADES				
i) Excavators, Graders, & Related	58.7	230.7	172	1.19
ii) Construction, Labourers	854	1,897.7	1,043.7	.81
iii) Carpenters	214.3	725	510.7	1.19
3. DISTRIBUTION & TRANSPORTATION				
i) Labourers, Material Handlings	15.8	44.8	29	.99
ii) Truck Drivers	145.3	398.3	253	.96
iii) Deck Crews	16.3	94.7	78.4	1.38
4. PERSONAL SERVICES				
i) Chefs and Cooks	80.3	262	181.7	1.05
ii) Waiters	114	285.7	171.7	.82

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Since seasonality in employment is a continuing problem, efforts to reduce the extent of seasonality could contribute to objectives of increasing employment together with lessening the dependency of the Province's residents upon transfer payments.

There may exist potential for extending the length of the employment periods in those sectors characterized by extreme seasonality - through e.g technical chnages, potential may also exist for establishing other, complementary, seasonal activities in the off-seasons.

3. Chronic vs Seasonal Unemployment:

It is important that the distinction be made between chronic long-term unemployment and underemployment and seasonal unemployment.

It is extremely difficult however, to isolate that portion of unemployment which is seasonal and that portion which is chronic, since many individuals who are in fact chronically unemployed (e.g. due to poor education, skills), may at times be involved in seasonal occupations.

Although it is difficult to measure chronic unemployment and underemployment (ie employment which involves relatively unproductive use of human resources), an understanding of its importance and causes is crucial to efforts to increase employment and the productive use of human resources in the Province.

v) Quality of the Labour Force

Labour Force quality was identified by the Economic Council, in its Living Together report, as one important factor affecting productivity.

Productivity differentials were identified as a major cause of income disparity, and low productivity is associated with high unemployment.

The Economic Council estimated that one-quarter of the differential in output per worker between P.E.I. and Canada was due to labour force quality.

Educational attainment is the most important determinant of labour force quality. The average educational attainment of

the existing labour force, and the new entrants to the Province's labour force, although improving somewhat in very recent years, is still relatively low.

Retention rates from grade 2 to grade 12 and from grades 8-12 in the Province's school system are indicated and compared to the respective Canadian figures in the following tables.

Retention rates in the P.E.I. school system are, therefore, considerably below the Canadian average, and the retention rate of male students is particularly poor.

Many high school dropouts have found employment in the primary sectors or in related seasonal occupations, thereby further contributing to the problem of low-productivity in the resource-based sectors. Many others find employment in the marginal and low-paying areas of the service sectors.

Evidence indicates that the incidence of low income and high unemployment is particularly high among individuals with low educational attainment.

Table 27
GRADE 12 ENROLLMENT AS A PERCENTAGE OF
GRADE 2 ENROLLMENT 10 YEARS EARLIER

	P.E.I.		CANADA
	1976	1977	1976
Male	47.2	44.1	74.7
Female	67.6	63.6	82.8
Both	56.9	53.8	78.5

SOURCE: Statistics Canada, Education, Science & Culture Division, Projections Section

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Table 28
GRADE 12 ENROLLMENT AS A PERCENTAGE OF
GRADE 8 ENROLLMENT 4 YEARS EARLIER

	P.E.I.		CANADA
	1976	1977	1976
Male	54.5	52.6	75.2
Female	69.5	71.0	78.5
Both	67.0	62.1	76.8

SOURCE: Statistics Canada, Education, Science & Culture Division, Projection Section.

NOTE: It was indicated that, due to changes, in the Quebec education system the Canadian retention rates are somewhat inflated.

1977 Data on the Province's labour force indicates that the higher the level of education attained, the greater the participation in the Province's labour force.

TABLE 29
LABOUR FORCE
PARTICIPATION RATES
BY
EDUCATIONAL ATTAINMENT

Education Levels	Participation Rate (%)
All levels	57.3
Grades 0-8	45.4
Some High School	58.1
Some Post-Secondary	69.6
Post-Secondary Certificate/Diploma	67.1
University Degree	83.7

SOURCE: Statistics Canada, Labour Force Survey

Relative to the overall Canadian labour force, a much higher proportion of P.E.I.'s labour force is accounted for by individuals with only elementary school training, and a higher proportion of Canada's labour force has completed high school, or completed post-secondary and university training.

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TABLE 30
COMPARISON OF EDUCATIONAL ATTAINMENT
LABOUR FORCE - P.E.I. AND CANADA, 1977

Educational Level	P.E.I. Employed ('000)	P.E.I. Labour Force ('000)	% of P.E.I. Labour Force	% of Canadian Labour Force
Grades 0-8	10	11	22	17.8
High School	22	25	50	50.7
Post-Secondary	5	5	10	10.1
Post-Secondary Cert.	5	5	10	11.7
University	3	4	8	9.8

SOURCE: Statistics Canada, Labour Force Survey Div.

The rate of growth in the size of the Province's labour force will likely decline during the early to mid 1980's due to the effects of the decline in birth rates.

Educational attainment of the Province's labour force could become an increasingly important determinant of productivity. The type of employment available to new labour force entrants will also be of increasing importance.

The Economic Council indicated that:

> 'Provincial productivity, and so income disparities, could be reduced if means could be found to narrow further the chronic provincial disparities in educational attainment. That implies not only improving the qualifications of labour force entrants by lengthening the average number of years of formal schooling, but also finding means for adults already in the labour force to upgrade and expand their education.'*

The important of providing educational upgrading and skills-training to the employed labour force, as well as those who are unemployed, is also emphasized by the Economic Council. This suggests that longer-term manpower planning and education skills development related to longer-term trends with respect to decline and growth in sector employment opportunities, and policies with respect to employment, will be very relevant to economic development in the Province.

* Economic Council of Canada, Living Together, p. 217.

vi) Earnings and Wage Rates

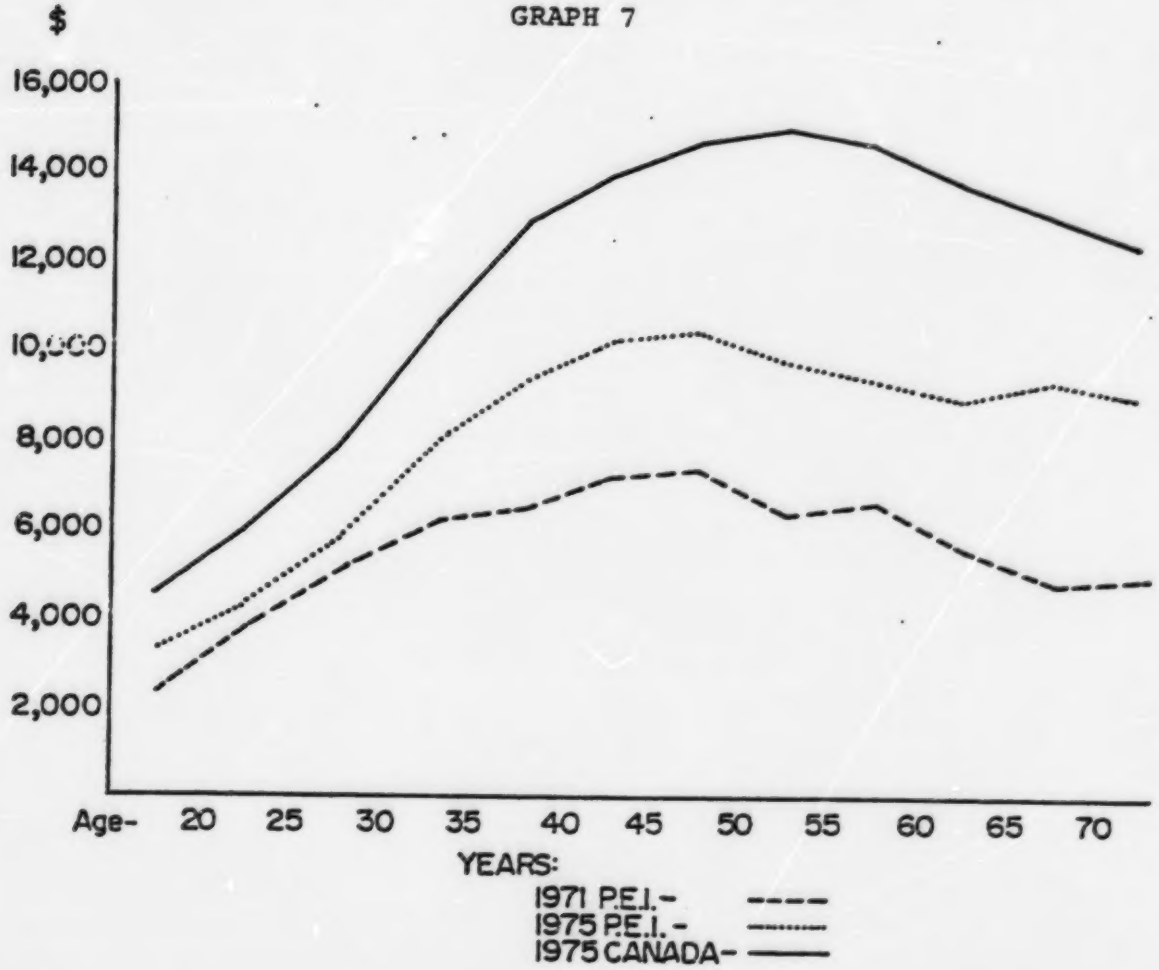
1. Income - Earning Potential

In 1971, the income-earning growth potential among those age groups usually considered to be most productive-30-45 years was stagnant relative to the situation for Canada.

The following graph, (based on income-tax data) indicates that since 1971 considerable improvement has occurred in terms of both earnings levels, and their pattern. Earnings increase much more rapidly in the productive age groups than was the case in 1971, (probably a reflection of the larger population in the productive age groups and expansion of employment in the tertiary sector). Incomes peak at a younger age in P.E.I., decline gradually, then peak again at about age 65.

AVERAGE INCOME BY AGE CATEGORY

GRAPH 7



SRE: An overview of the P.E.I. Economy, Dept. of Development, 1973 p. 108

2. Wage Rates - Productivity and Employment

Wages and salaries of employed workers in P.E.I. remain lower than the average levels for the Atlantic Region and for Canada. Average weekly earnings have however improved considerably relative to the average for the Atlantic Provinces and Canada.

TABLE 31
AVERAGE WEEKLY EARNINGS
P.E.I. ATLANTIC PROVINCES, CANADA
1971 and 1977

	1971 $	1977 $
P.E.I..	90	187.3
Atlantic Provinces	114	223.6
P.E.I. as %	79.0	83.8
Canada	137.6	251.6
P.E.I. as %	65.4	74.4

SOURCE: Statistics Canada, 72 -002, unadjusted series

There are a number of factors - e.g. difference in overall economic structure, structure of individual industries, and associated differing productivity levels, which account for the earnings differentials - for example*- Value added per man hour and per employee, and accordingly, wages, are lower in an economy such as P.E.I. which is based largely upon primary sector activity, and where the manufacturing base is small and based on low value added activities such as processing.**

Very little is understood concerning the relationships between wage rates and productivity, and wage rates and employment in the P.E.I. economy.

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* 'For example' - in P.E.I.'s manufacturing sector value added per man hour in 1974 was $8.00, compared to $11.00 for Atlantic Provinces and $30.00 for Canada.

** - the Economic Council found that, in 1970, the quality index for P.E.I. males in the manufacturing sector was 93 (Canada = 1000) whereas the wage-rate index was 71. For females, the corresponding figures were 100 and 76, reflecting the preponderance of female employment in seasonal occupations such as food processing.

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There are, however, a number of questions that merit further analysis:

1) The Econometric Policy model found that a negative relationship existed between wage rates and employment in both P.E.I.'s agriculture and manufacturing sectors.

> "An increase of $1.00 in agricultural wages would lead - all other factors remaining constant - to a drop of 3,528 in agricultural employment. The corresponding decline in manufacturing would be 2,877 jobs. Since the labour force in these sectors is relatively unskilled, the model appears to imply that an increase in wages, without a compensating rise in productivity, will result in a substitution of capital for labour. Development plan policies aimed at lowering the cost of capital might conceivably lead to a decline in total employment, rather than an increase in total production."

2) These suggests that increases in wage rates in various industries should be based on increases in productivity levels. It is accordingly important that the productivity levels in various industries and the factors affecting productivity in these industries be examined in detail.

3) The differences in industry structure between P.E.I. and other parts of Canada suggest that it is not realistic to attempt to achieve wage rates equivalent to that of other areas, indeed this might be a further locational 'disincentive' and might result in a decline in employment.

4) Increases in minimum wages could have the effect of benefiting those who are securely employed, but also result

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* An Economic Policy Model for Prince Edward Island, J.C. Fine, P. Nagarajan, 1977.

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in a loss of employment among marginal, low-productive workers, resulting in higher levels of unemployment.

The effect of introducing higher technology and higher wage industries upon employment and wages in other industries and sectors is not clear.

These questions point out the need for further analysis of 1.the factors affecting differences in wages and salaries, and productivity. 2. the behaviour of P.E.I. enterprises in various sectors in response to changes in the prices of capital and labour.

A clearer understanding of these factors is essential if employment generation, reduction in income disparity and improved income distribution are to be development concerns.

III. LEVEL AND SECTORAL COMPOSITION OF ECONOMIC ACTIVITY

1. OPEN-NESS OF THE PROVINCIAL ECONOMY

Perhaps the most significant characteristic of the Province's economy is the fact that it is an extremely open one. The overall level of economic performance - in terms of total output, employment and incomes, and the level of activity, employment and returns generated by each of the Province's major sectors, is heavily influenced by external factors.

The following observations exemplify the fact that this open-ness affects many areas of the Province's economic activity:

a) P.E.I.'s Gross Provincial Product is influenced by the changes in Gross National Product.

b) P.E.I.'s economy is very dependent upon the primary sectors, and due to the relatively small share of the market for which P.E.I. accounts, market prices received by the Province's primary producers are determined nationally and internationally. Similarly, the prices received for manufacturing products are externally-determined.

c) The size of the local market is extremely small and accordingly, the level of aggregate demand for the Province's output is heavily dependent on export activity of primary produce.

d) A very high proportion of the Province's expenditure is based upon imported commodities. Data with respect to the overall levels of import and export activity is limited. P.E.I. does, however, have a serious balance of payments problem. This means that the multiplier effect or potential impact of increased investment is severely limited by the fact that individuals will spend a large proportion of this increased income upon imported goods.

e) Provincial Government revenues and income of the Province's residents are extremely dependent upon Federal transfer In 1977 for example, equalization and other transfers from the Federal Government accounted for 55.7% of Provincial Government

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revenue. (Approximately half of this is accounted for by equalization.) Federal Government transfers to Island residents in 1976 totalled $120 million which was $1,000 per capita and accounted for over one-fifth of personal income. The Province furthermore, itself, has a very inelastic and small tax base and accordingly will continue to be extremely dependent upon the Federal Government.

f) The pattern of labour force participation in the Province and migration of individuals in productive age groups depends importantly upon conditions in the overall Canadian labour market.

It is therefore important that an analysis be carried out with respect to the 'dependency' or openness of the provincial economy in terms of its implications for the potential effectiveness of development plan and sectoral strategies.*

This, together with the fact that Federal plan funding accounts for the greatest proportion of developmental investment funds, indicates the importance of careful assessment of alternative strategies in terms of their potential impact.

2. LEVEL OF ECONOMIC ACTIVITY

Two indicators of the overall level of economic activity in the Province are Gross Provincial Product and Gross Domestic Product.**

i) Gross Provincial Product

Estimates of Gross Provincial Product developed by the Atlantic Provinces Economic Council are shown in table 32. The total value of provincial production increased by almost $400 million in dollar terms, and $81 million dollars in real terms. The average annual real rate of growth was 4.4%.

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* A brief analysis of import and export levels and the impact of income leakages is being separately prepared.

** Gross provincial product refers to the total market value of goods and services produced in the Province, whereas Gross Domestic Product nets out income accruing to the Province's residents from investment outside the Province and income earned in the provincial market accruing to outside the Province. However, since these measures have been developed by two separate agencies, they are not directly comparable in this case.

TABLE 32

GROSS PROVINCIAL PRODUCT ESTIMATES FOR P.E.I.

1971 - 1977

Year	G.P.P. Actual $* ($ Million)	% Annual Change	G.P.P. 1971 $ ($ Million)	% Annual Change	Implicit Prices** Deflator
1971	283	–	283	–	100
1972	323	14.1	297	4.9	108.8
1973	405	25.4	335	12.8	120.9
1974	453	11.9	348	3.9	130.2
1975	533	17.7	340	-2.3	156.8
1976	613	15.0	344	1.2	178.2
1977	670	9.3	364	5.8	184.1

* As calculated by the Atlantic Provinces Economic Council.
** Atlantic Provinces Economic Council- The Council recently developed a price deflator specifically for Prince Edward Island G.P.P. This differs from the Gross National Product deflator.

ii) Gross Domestic Product

Experimental data developed by Statistics Canada with respect to Gross Domestic Product includes information only until 1974. This data, however is extremely useful as it indicates the comparitive growth in the Province's output and total expenditure.

This data further illustrates the balance of payments problem referred to earlier.

Comparing 1966 and 1973 indicates that although the level of production has increased, the total level of consumer investment and government expenditure has increased proportionately to the same extent. (approximately 40%)

The absolute size of the 'production gap' has therefore been increasing and this difference is comprised of imports, capital inflows and transfer payments.

This sugests that although the output of our economy is increasing, the economy does not appear to be achieving a more self-supporting situation.

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TABLE 33

	GDP (Production) ($M)	Consumption, Investment, Gov't Expenditure plus Inventory Change ($M)	Net Exports plus Residual Error of Estimate (Production) ($M) (GAP)
1966	163.4	258.2	94.8 GAP
1971	253.2	377.3	-124.1
1972	284.9	421.9	-137.0
1973	355.3	526.3	-171
1974	302.2	591.8	-289.6*

SOURCE: Statistics Canada, Experimental Provincial Economic Accounts

3. SECTORAL COMPOSITION OF OUTPUT AND EMPLOYMENT

i) Introduction

An examination of the relative roles of the various economic sectors in terms of their contribution to provincial output and employment provides an essential framework or understanding of the structure of the provincial economy.**

The Institute of Public Affairs, Dalhousie University, has developed, using a number of sources and based on the Gross Domestic Product approach, estimates of value added and employment by sector for P.E.I. for the 1961-1976 period. (This data is used for purposes of this analysis and accordingly the figures differ from those produced by Statistics Canada.)

ii) Value Added by Goods Producing Industries and Tertiary Sector Activities

The following table indicates the actual dollar value added and percentage share of total value added by the major sectors. Although these figures must be interpreted cautiously, they suggest that, during the 1961-1975 period:

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* The 1974 GDP data in particular should be more closely examined to determine the reason for the very large gap.

** However, reliable information on the sectoral composition of economic activity is rather limited. Statistics Canada produces estimates of value added by sector for the goods-producing sectors but not the tertiary sectors. Estimates of the sectoral distribution of employment are developed by the Labour Force Survey are questionable and useful only as a very general indication of sectoral roles.

1) The overall output structure of the provincial economy has remained much the same.
2) The level of output and role of the primary sectors fluctuates widely from year to year, due primarily to the instability of returns in the agriculture sector.
3) The relative importance of the manufacturing sector remained stable at less than ten-percent of provincial output during the period.
4) The tertiary sector accounts for by far the greatest proportion of the value of the Province's economic activity (in the range of 60 to 75 percent of total output.)

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TABLE 34
VALUE ADDED AND % SHARE
OF
TOTAL VALUE ADDED BY SECTOR
1961 - 1975

	1961		1966		1971		1972		1973		1974		1975	
	$M	%	$M	%	$M	%	$M	%	$M	%	$M	%	$M	%
Primary Industries	15.0	15.8	28.6	19.5	22.4	9.9	30.1	11.6	49.6	15.1	66.1	17.3	44.2	10.7
Secondary Industry (Manufacturing	7.4	7.8	12.8	8.7	18.4	8.1	20.4	7.8	23.7	7.2	25.9	6.8	29.7	7.1
& Construction)	9.8	10.3	15.8	10.8	22.0	9.7	22.6	8.7	44.8	13.6	39.9	10.5	40.1	9.6
Tertiary Industry	62.9	66.2	89.6	61	164	72.3	185.5	71.6	210.4	64.0	249.2	65.4	304.6	72.8
TOTAL	95.1		146.8		226.8		258.9		328.6		381.2		418.6	

SOURCE: Institute of Public Affairs, Andrew S. Harvey, Dalhousie Univeristy, Value Added and Employment by Sector 1961-1976.

a) Goods-Producing Activity:

The following table indicates the level of production in the goods-producing sectors and the percentage share of total production accounted for by each of the goods-producing sectors during the 1971-1975 period.*

The primary sectors together account for the largest share of activity in the goods-producing sectors. The wide variation in the level of value added generated by the agriculture sector is mainly caused by the variation in potato production and potato prices (externally-determined).

The value added generated by fish landings is relatively small. Value added by fish processing activity is included in the manufacturing sector. Therefore, in the case of the fisheries sector, where almost all the catch undergoes some form of processing, the importance of the sector is not reflected by this value added measure.

The manufacturing sector has accounted for 20-30% of the value added by the goods-producing sectors. However, the linkage between the primary sectors and the manufacturing sector is very important - in 1975 for example, almost 70% of the value added in manufacturing was generated by the food and beverage industry, which in turn is mainly based on processing of farm and fish produce.

The level of activity in the construction sector, which has on the average accounted for more than one-third of the value added in the goods-producing sectors, also varies significantly. Although not shown separately in these figures, government investment in capital projects and housing in recent years has accounted for the greatest share of total construction activity. Indeed this is the main available instrument available to alter output in the short-term.**

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* The estimates developed by Institute of Public Affairs are more suited to drawing comparisons over time and conclusions re sectoral composition should be used cautiously. In the case of the goods producing sectors, the conclusions re sectoral composition do not differ significantly from those which would be arrived at using the Statistics Canada Survey of Production.

** See An Economic Policy Model, J.C. Fine, p. 23

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The structure of P.E.I.'s goods-producing industries is obviously relatively much more heavily oriented towards primary sector activity. By comparison, primary sector activity in the Canadian economy accounts for only approximately 11 percent of the value of activity in the goods-producing industry, construction activity accounts for less than 20 percent and manufacturing accounts for more than half.*

TABLE 35
VALUE ADDED IN GOODS PRODUCING INDUSTRIES
1971 - 1975

	1971		1972		1973		1974		1975	
	$M	%	$M	%	$M	%	$M	%	$M	%
Agriculture	15.9	25.3	23.7	32.4	41.5	35.1	58.5	44.4	36.6	32.1
Fishing	6.5	10.4	6.4	8.8	8.1	6.9	7.6	5.8	7.6	6.7
Manufacturing	18.4	29.3	20.4	27.9	23.7	20.1	25.9	19.6	29.7	26.1
Construction	22.0	35	22.6	30.9	44.8	37.9	39.9	30.3	40.1	35.2
TOTAL	62.8		73.1		118.1		131.9		114	

SOURCE: Value Added and Employment by Sector, 1961-1976 - Andrew S. Harvey, Dalhousie University.

b) Growth and Composition of Tertiary Sector Activity:

The tertiary sector, as shown above, accounts for the greatest share of value added in the provincial economy.

The level of activity in this sector, as a whole, is importantly linked to the growth in personal income, and is particularly influenced by the growth in transfer payments. This sector is comprised of the production of a range of services which are separated out in the following table.

The two largest components of the service sector are the whole range of community, business and personal services, and wholesale and retail trade. Transportation and utilities is the third largest component, while total government (3 levels) is the

* Although not directly comparable, these figures are based on 1975 Survey of Production - Statistics Canada, 61-202

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fourth, finance the fifth, Provincial Government activity has expanded to the greatest relative extent - associated with the large increases in staff and investment which occurred during this period. The 'rate' of growth of this sector will undoubtedly decline. The Finance, Insurance and Real Estate and Trade Sectors have also expanded significantly, more than doubling in terms of value added during this period.

TABLE 36
GROWTH OF P.E.I.
Value Added ($M)
TERTIARY SECTOR
1971 - 1977

Tertiary Sector Activity	1971	1972	1973	1974	1975	1976	1977
Transportation	28.0	31.7	34.7	41.8	48.7		
Trade	32.8	38.4	44.5	54.6	66.4		
Finance, Insurance & Real Estate	14.7	18.7	20.0	23.2	31.8		
Community Business & Personal Services	57.6	62.1	70.5	80.9	100.2		
Provincial Government*	8.0	9.3	11.8	15.5	21.2	25.6	27.9
Municipal Government*	1.3	1.4	1.7	2.1	2.6	2.8	3.1
Federal Government*	9.6	10.9	12.2	15.1	17.7	21.6	13.7
Defence	12.0	13.0	15.0	16	16**		
TOTAL	164	185.5	210.4	249.2	304.6		

SOURCE: Andrew S. Harvey, Institute of Public Affairs, Dalhousie University, Value Added and Employment by Sector - 1961-1976.

* The figures with respect to Government do not reflect the actual importance of Government to the provincial economy. It is, therefore, intended that a separate analysis of the role of the Government sector will be carried out.

** Figure was not provided for 1975. It was, therefore, assumed to be equal to 1974.

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iii) Employment by Sector

The long-term pattern of employment by sector has altered significantly.

Table (37) shows the sectoral distribution of man-years of employment for the 1961-1976 period.

1. Primary Industries:

In 1961 the primary sectors accounted for approximately one quarter of total employment. This proportion has declined to just over 10%. Total estimated man-years of employment directly provided by the agriculture sector declined by almost 4,000. Although this decline was particularly rapid during the 1961-1966 period, nevertheless, it continued in the following ten years. During the 1971-1976 period agriculture sector employment declined by approximately 1,000.

Employment in the fisheries sector declined slightly.

It may be argued that (1) since the decline in primary sector employment was in large part due to the fact that a large number of small, inefficient farm units went out of business and that the remaining farmers were larger and productive, that therefore the sector as a whole became more efficient. (2) the decline in farm numbers has occurred everywhere and is a natural trend.

However, this ignores some fundamental issues:

(i) in P.E.I.'s case our primary resources and primary-resource based industries are our basic resource and our area of comparative advantage. The fact that these key sectors have declined in importance in terms of their ability to support people is, in P.E.I.'s case, not a positive sign.

(ii) The effects of the loss in primary sector employment are not clearly understood. For example, it is not known whether the individuals who are leaving the primary sector are the same as those who have found employment in the expanding tertiary sector, whether they have migrated from the Province, or are supported by transfer payments.

(iii) Is a strategy of increasing efficiency and

TABLE 37
DISTRIBUTION OF EMPLOYMENT BY SECTOR
1961 - 1977
('000), (%)

	1961		1966		1971		1972		1973		1974		1975		1976	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Primary Industries*																
Agriculture	7.3		5.1		4.6		4.4		4.2		3.9		3.7		3.5	
Fishing	1.7	25	1.8	17.4	1.4	13.8	1.6	14.5	1.5	11.5	1.5	11.1	1.5	11.1	1.5	10.4
TOTAL	9.0		6.9		6.0		6.0		5.7		5.4		5.2		5.0	
Secondary Industries																
Manufacturing	1.7		2.5		2.4		2.6		3.1		3.5		2.8		2.8	
Construction	5.2	19.2	6.1	21.7	6.1	19.6	4.9	18.1	10.5	27.5	7.6	22.8	6.2	19.2	5.0	16.3
TOTAL	6.9		8.6		8.5		7.5		13.6		11.1		9.0		7.8	
Tertiary Industries																
	20.1	55.8	24.1	60.9	28.9	66.6	27.9	67.4	30.2	61.0	32.1	66.0	32.6**	69.7	35.2**	73.3
TOTAL	36		39.6		43.4		41.4		49.5		48.6		46.8		48	

* Forestry and Mining were not included since only very small levels of employment are indicated for certain years.
** Refer to footnotes on following table - Growth of Employment in P.E.I.'s Tertiary Sector.
SOURCE: Andrew S. Harvey - Estimates of Value Added and Employment by Sector - 1961-1976.

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improving marketing of primary sector produce consistent with a conern to stabilize the level of employment in the primary sectors ie. is it not possible that more productive primary sectors can arrest this decline in employment or even support more employment?

2. Secondary Industries:

Employment in the secondary industry sector as a whole has not shown any general trend. The level of total employment has varied due to the cyclical swings in construction sector activity.

Employment in the manufacturing sector appears to have increased during the 1961-1974 period but then declined somewhat.

These figures are rather surprising in view of the large infusions of capital assistance provided to the Province's manufacturing sector during recent years. The qualifications should therefore be made that i) these figures may reflect the decline which has occurred for example: in the fish processing employment.

ii) the impact of the 'job creation' activity in the manufacturing sector may not yet be relfected in terms of employment estimates.

However, there are a number of important issues related to manufacturing sector employment:

For example: while a significant proportion of the approximately 1,500 - 2,000 job-creation intentions during the 1971-1977 period have not yet been put in place, the impact of these job creation upon employment is not clearly understood, nor is the impact of capital assistance upon the employers choice of capital/labour inputs. It cannot be assumed that job-creation is equivalent to increasing employment (or reducing unemployment) without analyzing its effects on the Province's labour market and employment in other sectors.

Employment in the construction sector of the Province shows very definite peaks and troughs. 1973 in particular, and 1974 were peak years. The pattern of construction activity and

employment during recent years in particular, has been very heavily influenced, as mentioned earlier, by the large public investment in infrastructure (such as schools, downtown developments and in housing development. Indications are that construction activity will peak again in 1978 and 1979).

The construction sector is the major employer in the goods-producing area and is most important not only in terms of its magnitude, but also for the following reasons:

1) Indications are that high activity in this sector is associated with declines in migration out of the Province and therefore, contributes to the positive net-in-migration which has occurred.

2) When activity peaks in the construction sectors, a large number of young people leave the primary sectors to seek these higher-paying jobs. However, after the activity declines, the incidence of unemployment among the unskilled is very high while at the same time they may be unwilling or unable to return to primary sector employment.

3) Altering the level of housing or capital infrastructure construction is a major instrument available to the provincial government to alter output and employment. (The development plan has stimulated considerable infrastructure construction)

3. Tertiary Sector Activity:

The tertiary sector is by far the largest employer and has become increasingly important. In terms of employment - generation, therefore, the structure of the economy appears to have shifted towards the tertiary sectors*, which now account for almost three-quarters of total employment.

It is not known whether the individuals who have left the primary sector have obtained employment in the tertiary sector.

However, it is clear that the tertiary sector has accounted for "almost all" or indeed "virtually all" of the growth in employment which has occurred.

Table (38) shows the estimated level of employment by area of tertiary sector activity. More than half of the

* The Economic Policy Model (Fine & Nagarajan) notes the "structural shift in the economy directly to services, rather than to secondary manufacturing as originally envisaged in the Development Plan." p. 26

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growth in this sector's employment has occurred in the area of community, business and personal services. Increases in employment in wholesale and retail trade and in provincial government employment have also contributed substantially to this increase. (The tourism industry, although not defined as a separate economic sector, expanded rapidly during this period, and contributed significantly and directly to service sector employment.)

TABLE 38
GROWTH OF EMPLOYMENT IN P.E.I.'s
TERTIARY SECTOR
1961 - 1977
('000)

Tertiary Sector Activity	1961	1966	1971	1972	1973	1974	1975	1976	1977	Absolute Increase 1961-1977
Transportation & Utilities	4.0	4.0	4.6	4.3	4.3	4.0	3.6	4.0	4.0	0
Trade	5.6	6.0	6.8	6.0	6.3	7.8	8.0	9.0	8.0	2.4
Finance Insurance & Real Estate *	.7	.9	.9	1.0	1.2	1.3	1.3	1.3	1.3	.6
Community, Business & Personal Services	6.8	8.8	11.3	11.0	12.5	12.6	13.0	14.0	14.0	7.2
Provincial Government	.5	.6	1.2	1.4	1.4	1.7	2.2	2.6	2.6	2.1
Municipal Government	.3	.3	.3	.3	.4	.4	.4	.4	.5	.2
Federal Government	.9	1.4	2.0	2.1	2.2	2.3	2.2	2.0	1.9	1.0
Defence **	1.3	2.0	1.8	1.8	1.9	1.9	1.9	1.9	1.9	.6
TOTAL	20.1	24.1	28.9	27.9	30.2	32.1	32.6	35.2	34.2	14.1

* Finance Insurance and Real Estate figures were not available for 1976 and 1977 and were therefore assumed equal to 1975.

** Defence figures were not avialable 1975, 1976, and 1977 and were therefore assumed equal to 1974.

SOURCE: Value Added and Employment by Sector, 1961-1976, Andrew S. Harvey, Institute of Public Affairs, Dalhousie University.

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There are a number of important observations related to this expansion in tertiary sector employment:

(1) Expansion in demand for trade products and personal services is determined by incomes generated by the other sectors and by transfer payments. Future growth in these areas will depend importantly upon development in the other sectors.

(2) Many of the jobs in the trade and personal service areas are relatively low-paying. It is these jobs which have both absorbed and attracted the increasing numbers of young people and secondary earners in the labour force.*

(3) The expansion of Provincial Government employment is now completed and employment in this area should stabilize. This area has accounted for relatively higher-paying employment.

(4) The rapid expansion in the tourism sector activity appears to be levelling off. Furthermore, the level of activity in this sector employment depends importantly on economic influences outside the Province and it is doubtful whether this sector will generate increased employment.

(5) There are a number of areas of tertiary sector activity which are somewhat specialized and are expanding elsewhere. (Since these are so different from traditional service activities they could be considered as a separate sector.)**

The extent to which the P.E.I. economy can share in this growth has not yet been determined.

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* A.P.E.C. has suggested that, as the total numbers of young entrants and secondary earners in the labour force decline, there may be a shortage of labour supply in this area, together with chronic unemployment of other members of the labour force.

** For example, specialized storage and distribution activities, specialized business services, specialized institutions, educational, government, etc., head offices, technical and financial services, research and development activities, etc.

(6) At the same time, relatively little is known about this sector of the Province's economy - in terms of which specific activities have grown, which areas indicate potential, what type of employmentit provides and to whom,etc. Although this sector's growth and performance is importantly determined by incomes and demand from the other sectors, it is likely that a better understanding of this sector - its situation and potential - could contribute to economic development efforts.

This brief examination of the sectoral composition of output and employment, however, provides only a very general picture of the economy. It does not, and cannot address a number of critical and complex questions which must be addressed in order to formulate a long-term development strategy.

One key question is the following: What is the extent of inter-dependency between the major economic sectors and what is the potential relative economic and social impact of investing in various sectors? Of particular importance is an examination of the potential developmental impact of emphasizing in resource-based (ie. primary sector and primary sector based activity) as compared to non-resource based activity. This paper has not dealt with the level and pattern of investment which has occurred, and its effects, nor has it dealt with choices in terms of investing plan funds or orienting overall development policy.

Not only do we not properly understand the impact of investing developmental funds and efforts in various areas in terms of the set of developmental concerns with respect to reducing income disparity, improving income levels, improving distribution, increasing productivity, increasing employment, improving the ability of the Province to support itself, etc., but also we do not properly understand the degree to which trade-offs exist between these aims.

It is important that in-depth analysis be carried out on a sectoral basis to support sector planning strategies. However, in order to formulate a long-term development strategy it is essential that the above issues be subject to in-depth analysis.